THE UNITED STATES PATENT AND TRADEMARK OFFICE

\$3001

ipplication of

Applicants : André SCHEELEN et al.

Appln. No. : 09/115,229

Filed : July 14, 1998

: POLYETHYLENE-BASED COMPOSITION For

AND PROCESS FOR THE MANUFACTURE

OF ARTICLES SHAPED FROM THE

COMPOSITION

: 32234-144216 (formerly SLVPE 3741.01)

AUG ROUPD **TRANSMITTAL OF SCHEELEN** DECLARATION

Group Art Unit; 1772

Examiner: RA

August 29, 2001

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

This paper is presented in conjunction with the August 9, 2001 RESPONSE to the Office Action of April 30, 2001.

Attached hereto is the originally executed DECLARATION of Andre Scheelen.

Reconsideration and an early allowance are respectfully solicited.

Respectfully submitted,

Marina V. Schneller

Reg. No. 26,032

VENABLE

P.O. Box 34385

Washington, D.C. 20043-9998 Telephone: (202) 962-4800

Telefax: (202) 962-8300



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 1772 Examiner: R. Dye In re application of Applicants : André SCHEELEN et al. Appln. No. : 09/115,229 Filed : July 14, 1998 **DECLARATION** For : POLYETHYLENE-BASED COMPOSITION AND PROCESS FOR THE MANUFACTURE) OF ARTICLES SHAPED FROM THE RECEIVED
TC 1700 COMPOSITION Atty. Dkt. : 32234-144216 (formerly SLVPE 3741.01) **Assistant Commissioner for Patents**

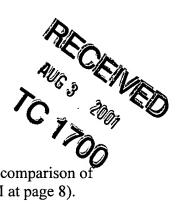
Sir:

Washington, D.C. 20231

I André Scheelen, one of the inventors of the above-identified application declare and state the following:

We have found that the addition of a small amount of talc to polyethylene provides a composition characterized by a markedly improved resistance to hydrostatic pressure and a markedly improved creep resistance (as stated at page1, lines 21-23, of our application). The addition of small amounts of talc, of less than 1 part by weight per 100 parts by weight of high density polyethylene, provides compositions which make possible the manufacture of shaped articles, such as pipes, for which the creep resistance is significantly improved without affecting the other mechanical properties of the said shaped articles (page 2, lines 9-15). Consequently, the resins are very suitable for the manufacture of high pressure pipes (see application, page 1, lines 15-23).





These unexpected results were demonstrated in the Application by the comparison of Example 1 (according to the invention) and Comparative Example (see Table I at page 8).

In order to prove that the quantity of talc added to the polyethylene compositions is critical, we have conducted the following new <u>comparative</u> experiment, which was undertaken under my supervision:

A polyethylene composition was prepared such as disclosed in Example 1 of the patent application but by adding 10.5 g of talc (instead of 1 g) to 980.4 g of polyethylene resin (instead of 989.9 g). Hence, the composition contained 1.07 g of talc per 100 g of polyethylene.

The mechanical properties of this composition were measured according to the methods disclosed in the patent application and were compared to those measured on the compositions of Example 1 and of the Comparative Example already disclosed in the Application (see Table hereunder).

	Example 1	Comparative	New comparative
		example	example
			(with more than 1 part of talc
		(without talc)	per 100 parts of
			polyethylene)
T (hours)	342	134	310
RCP (bar)	9.5 to 10	10 to 12	7 to 7.5
(at 0°C) *			

^{*}measured according to the method disclosed in the Application, but at 0°C instead of – 15°C.

As can be seen, compositions containing more than 1 part of talc per 100 parts of polyethylene have a RCP value lower than the compositions according to the invention or than compositions containing no talc. Moreover, their creep resistance (t) is slightly lower than the composition according to the invention.

Hence compositions comprising more than 1 part of talc per 100 parts of polyethylene do not exhibit an improved creep resistance without a deleterious affect on the other mechanical properties. Such compositions are less suitable for making pipes or pipe fittings.

These comparative examples clearly show the criticality of the amount of talc added to the polyethylene.

I further declare that all statements are true and believed to be true and understand that willful false statements may jeopardize the validity of any patent issuing hereon and may result in fine and/or imprisonment.

AUGUST 3, 2001 Date

André Scheelen